## Southwest Trafficway Ramp Metering

On August 12, MoDOT initiated several changes to the northbound I-35 traffic configuration to accommodate bridge deck replacement at Southwest Trafficway. Traffic was switched to the two newly redecked inside lanes to allow workers to remove and replace the deck on the three outside lanes.

Part of the change involved something new, the addition of a ramp meter to control northbound Southwest Trafficway traffic that merges with northbound I-35 traffic. MoDOT Transportation Project Manager Mark Sommerhauser explains the engineers' process, and why ramp metering at this location was selected to help minimize congestion.

"This project has been extremely difficult due to the large bridge deck area to be removed and replaced. This second construction phase involves replacing the three far right lanes of the bridge, which causes even greater impacts to travelers.

MoDOT staff investigated three options for maintaining northbound traffic during this second phase of construction:

1) Completely close the on-ramp from Southwest Trafficway to northbound I-35 (similar to how the on-ramp from northbound Broadway was closed).

This choice would eliminate concerns about traffic from Southwest Trafficway sharply weaving over to the left and merging with the two lanes of northbound I-35. Although this choice would be the safest for construction workers, the huge amount of detoured traffic would cause problems throughout the area by overloading both the city streets and I-35.

2) Reduce northbound I-35 to only one lane after Cambridge Circle and give the on-ramp from Southwest Trafficway the second lane as a continuous on-ramp lane.

This choice would be great for traffic along Southwest Trafficway, but our analysis shows that the backups along northbound I-35 would spill deep back into Kansas and bottleneck traffic between Antioch and I-635. With northbound traffic backed up beyond I-635, one of the best detour routes (I-35 to I-635 to I-70 east) would become useless as a diversion route.

3) Install a ramp meter along the northbound onramp from Southwest Trafficway so a manageable number of vehicles could still merge onto northbound I-35, especially during the middle of the day when traffic is lighter.

Motorists are still urged to find an alternate route during the rush hour periods, but limited traffic is still allowed to use the onramp at all times. The sharp weave and merge onto northbound I-35 is safer with one or two vehicles merging at a

time instead of 20-30 vehicles, which is the number that is usually released at a time by the traffic signal at the top of the ramp.

Safety is always MoDOT's primary goal and it would have been too dangerous to release 30 cars bumper to bumper down this on-ramp and make them all jog over and merge with just two lanes of already congested interstate traffic."

MoDOT is open to suggestions. If you see any way that we can improve the ramp metering operations or the construction work zone, contact us at <a href="mailto:kccustomerrelations@modot.mo.gov">kccustomerrelations@modot.mo.gov</a>, or call 888-275-6636.